

USAF AOA PROCESS

PROCESS

Direction: The Milestone Decision Authority (MDA) makes all final program decisions. The MDA decision is documented in an Acquisition Decision Memorandum (ADM). The MDA may direct Analysis of Alternatives (AoAs) for any ACAT and milestone. Normally, only ACAT Is need AoAs for their Milestone I decision. However, the MDA may also direct an update of the AoA for other milestones if the threat or mission changes or if new information on performance/cost must be considered. The AoA is subject to tailoring and streamlining based on the type and size of the program, maturity of the system concepts and other considerations as determined by the MDA. The ADM gives guidance on the required scope and level of detail in the AoA. The ADM also identifies the analytical requirements for the next decision point (i.e., exit criteria). The ADM should identify sources of funding for accomplishing the AoA. If it does not, the Program Management Directive (PMD) issued by SAF/AQ or USAF/XO should identify a funding source.

Execution. The lead MAJCOM is responsible for executing the AoA. The MAJCOM will appoint a study director and assemble the AoA study team. OAS will appoint an assistant to the study director to help guide the AoA process. The MAJCOM study director is the focal point for all study activities and exercises overall responsibility for these efforts. The AoA study team is composed of members from the MAJCOM staff, Air Staff, support commands, OAS, contractors, and others as necessary. For joint programs, membership will include representatives from the appropriate Services, who may provide study co-leads. OSD (DPA&E) participation on the AoA study team is encouraged. The AoA study team will develop a study plan of sufficient detail to address the issues established by the MDA. The study plan is intended to be a living document and should be updated periodically. The AoA study plan should follow a format similar to the final report.

Review. The MAJCOM determines procedures for AoA study plan, report review, and staffing prior to Air Force-wide distribution. Their job is to ensure focused, sustained progress in a useful analysis to support program decisions by the Service or Defense Acquisition Executive (SAE or DAE). The coordination process offers a unique opportunity to verify objectivity, quality, suitability, and to develop wide acceptance of the AoA's analytical underpinnings. The Office of Aerospace Studies (OAS) or a Technical Review Group (TRG) will review and present an assessment of the study plan to the AFROC. Mid-term (if required) and final results and assessments will also be reported to the AFROC and AF Council.

Reporting.. The reporting process will usually include results briefings in this order: AFROC, AF Council, OIPT, and DAB. The OSD Director of Program Analysis and Evaluation (DPA&E) reviews ACAT I and directed AoAs, and prepares a report assessing whether all reasonable alternatives have been examined and whether the costs, benefits, and risks have been adequately addressed. This report is circulated to all DAB members prior to the milestone review.

Follow-on. The MDA bases his or her decision on the results of the AoA I and other information which examine the feasibility and affordability of a new acquisition program. A favorable decision at this juncture establishes a new acquisition program with a concept baseline (initial cost, performance, supportability, and schedule objectives), and allows entry to Phase I. To enter Phase I, the program must be fully funded. The final report will be approved by the MAJCOM and forwarded to AF/CV within 180 days. The standard AoA report format should be used to maintain consistency and ensure completeness. An AoA II during Phase I will include cost, performance, supportability, and schedule tradeoffs of the alternative concepts. Cost drivers should be identified, along with maximum cost and minimum performance levels. AoA II will be more detailed than AoA I, and there should be fewer and more clearly defined alternatives. In extreme cases, concepts discarded at Milestone I may be reconsidered during Phase I. In certain situations where

technology, threat, or program face significant changes during later phases, it may be necessary to continue AoA efforts throughout the acquisition cycle.

AF ORGANIZATIONS

MAJCOMS - For Air Force programs, the Office of Assistant Secretary of the Air Force for Acquisition (ASAF/AQ) gave the responsibility for preparing AoAs to the operating commands, with the support and assistance of the acquisition (implementing) command.

AoA Working Group - Lead operating command appoints a director and establishes a group responsible for the planning and execution of the AoA. Membership could include other DOD organizations, non-DOD organizations, and representatives from a variety of directorates within the operating command, implementing command, and other Air Force organizations. The working group interfaces closely with oversight/advisory organizations and the IPT structure.

Office of Aerospace Studies (OAS) - The AFMC Office of Aerospace Studies (AFMC/OAS) is the Air Force Center of Expertise (COE) for AoAs. The AoA COE supports the MAJCOM study director in helping administer, plan, execute, and facilitate the reviews. OAS is responsible for the AF AoA training course and the AoA handbook as required by Air Force Instruction 10-601, *Mission Needs and Operational Requirements Guidance and Procedure*.

Air Force Council (AFC) - Addresses AoA adequacy and completeness through review.

Air Force Requirements Oversight Council (AFROC) - Assures that operational requirements are being met by serving in a review and oversight role.

Technical Review Group (TRG) - The TRG assesses ACAT I and selected ACAT II AoAs for technical adequacy and completeness of the analytical approach and results. The Air Force Operational Test and Evaluation Center (AFOTEC) is responsible for reviewing the linkage between the TEMP and ORD/AoA (as outlined in Section 4.3.5 of the AoA final report) and for presenting a linkage assessment to the TRG.

Secretary Air Force, Acquisition (SAF/AQ) - SAF/AQX directs the appropriate SAF/AQ organization to prepare the ADM prior to PMD issuance and will participate on the AoA WG and IPTs as appropriate.

Secretary Air Force, Financial Management and Comptroller (SAF/FMC) - This organization convenes the Air Force Cost Analysis Improvement Group (AFCAIG) and reviews the AoA report as required. SAF/FMC also provides policy guidance pertaining to the Air Force cost community. SAF/FMC will participate on the WG and appropriate IPT as required. They coordinate with the AoA WG to ensure the AoA cost analysis is consistent with the Program Office Estimate (POE). SAF/FMC will provide the AF interface with the OSD CAIG on AoA costing issues.

HQ USAF Director of Command and Control (XOC) - XOC provides specific oversight of all Air Force AoAs. A key role of XOC is to develop and issue guidance related to the Air Force AoA process. XOC also develops policy and processes for modeling, simulation, and analysis, and forms process action teams (PATs) for AoA issues.

HQ USAF Director of Requirements (XOR) - XOR serves as the executive agent for managing AF-wide mission needs and operational requirements that may result in research, development, test and evaluation (RDT&E) and procurement appropriations. XOR prepares and issues the Milestone 0 PMD for starting concept studies. The PMD, designates the lead operating command to develop the AoA, identifies and directs all participating organizations, identifies funding sources, and identifies a minimum set of alternatives for consideration.

XOR manages the Air Force MNS and ORD/RCM processes which are governed by the DOD 5000-series publications and implemented by AFI 10-601. They review all requirements related documents (MNS, AoA, ORD/RCM, TEMP, and STAR) before a milestone decision. XOR will also participate on the WG and appropriate IPT as required.

HQ USAF/SC - This organization reviews MNSs, ORDs, and AoAs to ensure command, control, communications, computers, and information (C4I) requirements are adequately addressed. Their overall role is to develop C4 policy on architecture, integration, and interoperability.

HQ USAF Test and Evaluation (TE) - HQ USAF/TE reviews final MNSs, ORDs, and AoAs for test and evaluation issues. They also provide overall policy guidance for the development of test and evaluation strategies.

HQ USAF Director of Weather (XOW) - This organization reviews MNSs, ORDs, and AoAs to ensure weather sensitivities and aerospace environmental support are adequately addressed.

Air Force Studies and Analyses Agency (AFSAA). The AFSAA reviews and evaluates MNS, ORD, and AoA documents as required. The AFSAA role in the AoA process is to provide selected AoA support and analytical consultation to the participating operational commands and support agencies throughout the AoA process.

Air Force Cost Analysis Agency (AFCAA). The AFCAA conducts Air Force Component Cost Analyses (CCA) for weapon system acquisition programs and automated information systems as required by DOD directives. They develop cost models, methodologies, and databases necessary to ensure credible CCAs and other cost estimates and cost analyses performed throughout the Air Force. Responsibility for establishing and maintaining the cost library belongs to SAF/FMCC.